

**UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
RENTON, WASHINGTON 98055-4056**

In the matter of the petition of

Fokker Services B.V.

for an exemption from §§ 25.562 and
25.785(b) of Title 14, Code of Federal
Regulations

Regulatory Docket No. FAA-2003-15705

GRANT OF EXEMPTION

By letter dated July 18, 2003, Mr. Ron Huisman, Fokker Services B.V., Lucas Bolsstraat 7, 2152 CZ Nieuw-Vennep, P.O. Box 231, 2150 AE Nieuw-Vennep, The Netherlands, petitioned for an exemption from §§ 25.562 and 25.785(b) of Title 14, Code of Federal Regulations (14 CFR), to the extent necessary to permit certification of medical stretchers for transport of persons whose medical condition dictates such accommodation. The exemption is for installation of medical stretchers on Gulfstream G-V airplanes.

Sections of the Federal Aviation Regulations (FAR) Affected

Section 25.785(b) requires that each seat, berth, safety belt, harness, and adjacent part of the airplane at each station designated as occupiable during takeoff and landing must be designed so that a person making proper use of those facilities will not suffer serious injury in an emergency landing as a result of inertia forces specified in §§ 25.561 and 25.562.

Section 25.562 specifies dynamic test conditions for qualification of occupant injury criteria as well as structural retention criteria.

Petitioner's Supportive Information

In accordance with FAR 11 section 63 and in coordination with the FAA Program Manager, Mrs. Cindy Lorenzen, herewith Fokker Services formally files a petition for exemption for compliance with the requirements of § 25.562 and § 25.785(b) of Title 14, Code of Federal Regulations (14 CFR) for the installation of a medical stretcher. This petition for exemption is applicable for the Gulfstream G-V aircraft, modified by Fokker Services B.V. for the Japanese Coast Guard.

Description

Fokker Services B.V. is currently modifying two aircraft, Type Gulfstream G-V, for the Japanese Coast Guard on an FAA STC basis. As part of the modification program a stowage (p/n 104194, vendor Muehlenberg, Germany) with a stretcher (p/n 1203-001, vendor Spectrum, USA) will be installed in the Gulfstream G-V aircraft. The stowage is located RH aft of the aircraft between GVFS 573.5 and GVFS 644.3.

Section 25.562, as included by reference in Type Certificate Data Sheet (TCDS) A12EA for G-V airplanes, requires compliance with the structural and occupant protection requirements of § 25.562 as adopted by Amendment 25-64, except that shoulder harnesses on all seats may be provided in lieu of demonstrated compliance with the restraint strap loading, head protection, and femur loading test requirements of § 25.562(c)(1), (c)(5), and (c)(6), respectively.

Section 25.785(b), as amended by Amendment 25-72, requires that each seat, berth, safety belt, harness, and adjacent part of the airplane at each station designated as occupiable during takeoff and landing must be designed so that a person making proper use of these facilities will not suffer serious injury in an emergency landing as a result of the inertia forces specified in § 25.561 and § 25.562.

Fokker Services B.V. hereby petitions for an exemption of complying with § 25.562 and § 25.785(b) of the Federal Aviation Regulations (FAR) to the extent necessary to permit certification of medical stretchers for transport of persons whose medical condition dictates such accommodations. The exemption would be applicable for installing the medical stretcher in the Gulfstream G-V.

Fokker Services B.V. notes that the estimated cost of demonstrating compliance of stretcher installations with dynamic test requirements is quite high considering the limited number of units for which the cost could be amortized. Since none have been shown to comply with the dynamic test criteria, stretchers can not currently be used on airplanes whose type certificate bases include the dynamic requirements.

With respect to the overall level of safety, full compliance with the requirements of § 25.561 will be demonstrated for the stretcher. In addition, the remainder of the seats will comply with § 25.562 to the extent required by the certification basis of the Gulfstream G-V.

Fokker Services B.V. feels that granting the petition would be in the public interest for the following reasons:

1. The level of safety that would be provided is an acceptable level of safety given the limited usage and exposure of the stretcher;
2. Compliance with the dynamic test requirements would be difficult at best, and very expensive, while returning a marginal safety benefit. In addition, § 25.562 is written specifically for seats and would not be easily applied to a stretcher.”

Publication and Public Comment

On August 13, 2003, the FAA published notice of the petition for exemption in the Federal Register and requested comments from the public. No comments were received in response to the notice.

FAA’s Analysis of the Petition

The FAA agrees that stretchers for medical use were not considered in the context of the dynamic test requirements of § 25.562 when the regulation was developed. Occupancy of berths during takeoff and landing for ambulatory persons was not considered feasible under the conditions of § 25.562; and for the purposes of compliance, stretchers are considered “berths.”

The FAA agrees that demonstrating compliance with the requirements of § 25.562 would be very difficult and that applicability of the existing pass/fail criteria to these installations is questionable, since the existing criteria were developed for seats rather than berths, including medical stretchers.

There is a need for such medical systems on airplanes. The value to the public is that such accommodations provide air transport for critically ill patients. Without such accommodations, some critically ill people may not be able to receive necessary medical attention in a timely way, and any safety benefit from averting the possible consequences of a stretcher not meeting the dynamic test requirements becomes moot.

The FAA has also considered the fact that use of the stretcher will be limited and will be on a case-by-case basis. The risk of an accident on any given flight is, therefore, less than for airplanes in general. Since the stretcher will be used for takeoff and landing only by persons who cannot occupy a seat due to injury or illness, the FAA does not consider this a precedent-setting finding.

With respect to the overall level of safety, the FAA notes that full compliance with the requirements of § 25.561 will be required for the stretcher. This approach is consistent with the standards for all seats prior to the adoption of § 25.562. An alternative to this exemption would be to seek transportation on an airplane whose certification basis does not require dynamic testing (i.e., an airplane with an earlier certification basis). While this alternative would meet the applicable rules, the FAA does not consider that this is a desirable approach. While differences in certification bases are not sufficient to justify an exemption, the FAA does not consider that safety necessarily would be served by using an airplane with an earlier certification basis.

The Grant of Exemption

In consideration of the foregoing, I find that a grant of exemption is in the public interest, and will not significantly affect the overall level of safety provided by the regulations. Therefore, pursuant to the authority contained in 49 USC 40113 and 44701, delegated to me by the Administrator (14 CFR 11.53), the petition of Fokker Services B.V. for exemption from the requirements of §§ 25.562 and 25.785(b) of the FAR for installation of medical stretchers on Gulfstream G-V airplanes is hereby granted, with the following provision:

Occupancy for takeoff and landing is limited to non-ambulatory persons. Suitable means to identify this limitation shall be provided as part of the stretcher type design.

Issued in Renton, Washington, on October 3, 2003.

/s/ Ali Bahrami
Acting Manager
Transport Airplane Directorate
Aircraft Certification Service